APPENDIX J

GENERAL HEALTH EFFECTS OF PBT CHEMICALS IN VIRGINIA REPORTS

U.S. EPA has designated a list of chemicals as Persistent Bioaccumulative Toxic (PBT). These chemicals remain in the environmental for long periods of time, are not readily destroyed, and build up or accumulate in body tissue. The eight TRI PBTs that are commonly reported by Virginia facilities are:

Benzo(g,h,i)perylene
Dioxin and Dioxin-like compounds
Lead
Lead Compounds
Mercury
Mercury Compounds
Polycyclic Aromatic Compounds (PACs)
Poly chlorinated Biphenyls (PCBs)

Because of heightened awareness of PBTs, more information can be found at the following websites about PBTs to further enhance understanding of these chemicals. These web links provide information on the general health and environmental hazards and effects for TRI PBT chemicals. This is an abbreviated compilation of chemical information from several public sector (government) and non-public sector publications and Internet sites.

- USEPA web site on Persistent Bioaccumulative and Toxic (PBT) Chemical Initiative (http://www.epa.gov/pbt/)
- International Chemical Safety Cards (http://actrav.itcilo.org/actrav-english/telearn/osh/kemi/icsc.htm)
- EPA Integrated Risk Information System (IRIS) (http://cfpub.epa.gov/ncea/iris/index.cfm)
- U.S. Dept. of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR) (http://www.atsdr.cdc.gov/)

It is very important to recognize that the effects of exposure to any hazardous substance depend on the dose (concentration and quantity), duration (how long one is exposed), the route or pathway by which one is exposed (how one is exposed such as breathing, eating, drinking, or skin contact), personal traits (susceptibility) and habits, and whether other chemicals are present.

There are numerous sites for reference information on the chemicals listed above, and they vary in scientific/technical detail. In this document, preliminary reference sites are listed for readers with interest in researching more detailed information. Before reaching any conclusion on exposure, risk, and health effects, readers should consult these and other reference sites as well as their physicians for information.